Fiscalini Ranch Preserve

Monterey Pine Forest Fuel Reduction and Forest Restoration

Project Description - Minor Use Permit Application

Prepared for:

The County of San Luis Obispo

Prepared by:

Friends of the Fiscalini Ranch

Table of Contents

Project Applicant & Contact Persons

This proposal has been prepared and submitted by the Friends of the Fiscalini Ranch Preserve (FFRP), located at 604 Main Street, Cambria, CA 93428. Jo Ellen Butler, Executive Director, is the primary contact and may be reached by phone at (805) 927-2856, email at ***ffrpcambria@sbcglobal.net*** or mail at P.O. Box 1664, Cambria, CA 93428. Holly Sletteland, Project Manager & Independent Contractor, is an alternate contact and may be reached at (805) 239-3928, ***hslettel@calpoly.edu*** or 4849 See Ranch Lane, Templeton, CA 93465.

The proposal has been reviewed and authorized by the owner of the property, the Cambria Community Services District (CCSD), located at 1316 Tamsen Street, Suite 201, Cambria, CA 93428. Carlos Mendoza, Ranch Manager, is the primary contact and may be reached by phone at (805) 927-6220, email at ***cmendoza@cambriacsd.org*** or mail at P.O. Box 65, Cambria, CA 93428.

Project Location

The primary focus of this project is the Fiscalini Ranch Preserve, with an adjacent parcel owned by the CCSD included in one phase only (Hazardous tree removal). All of the project is located within the town of Cambria, in San Luis Obispo County on the Central Coast of California (refer to Figures 1 and 2). Highway 1 divides the ranch into two sections – one to the west and one to the east. This project will take place entirely in the forested area on the western section of the preserve. This section is bounded by Warren Road to the south, Huntington Road to the North, the Pacific Ocean to the west and Highway 1 and Trenton Avenue to the east. The adjacent CCSD parcel is also located to the west of Highway 1, with the CCSD wastewater treatment plant to the north, Fiscalini Ranch to the south and Huntington Road to the east.

The Fiscalini Ranch Preserve is made up of 6 parcels (Assessor Parcel Numbers: 013-101-013; 013-101-086; 013-121-025, 013-121-026; 013-131-038; 023-411-022) comprising a total of 430 acres. The adjacent CCSD property is 16.77 acres and its parcel number is 013-121-026. All of the project is located in Supervisorial District 2, within the North Coast Planning Area and the Coastal Zone. The Ranch and CCSD parcel include areas designated as Flood Hazard Areas (FHA). The Ranch is also a Sensitive Resource Area (SRA). Its Coastal Designations include Wetland and Archeologically Sensitive Areas. The Land Use Category is Open Space and Recreation which allows for the preservation of fragile plant and animal communities and passive recreation.

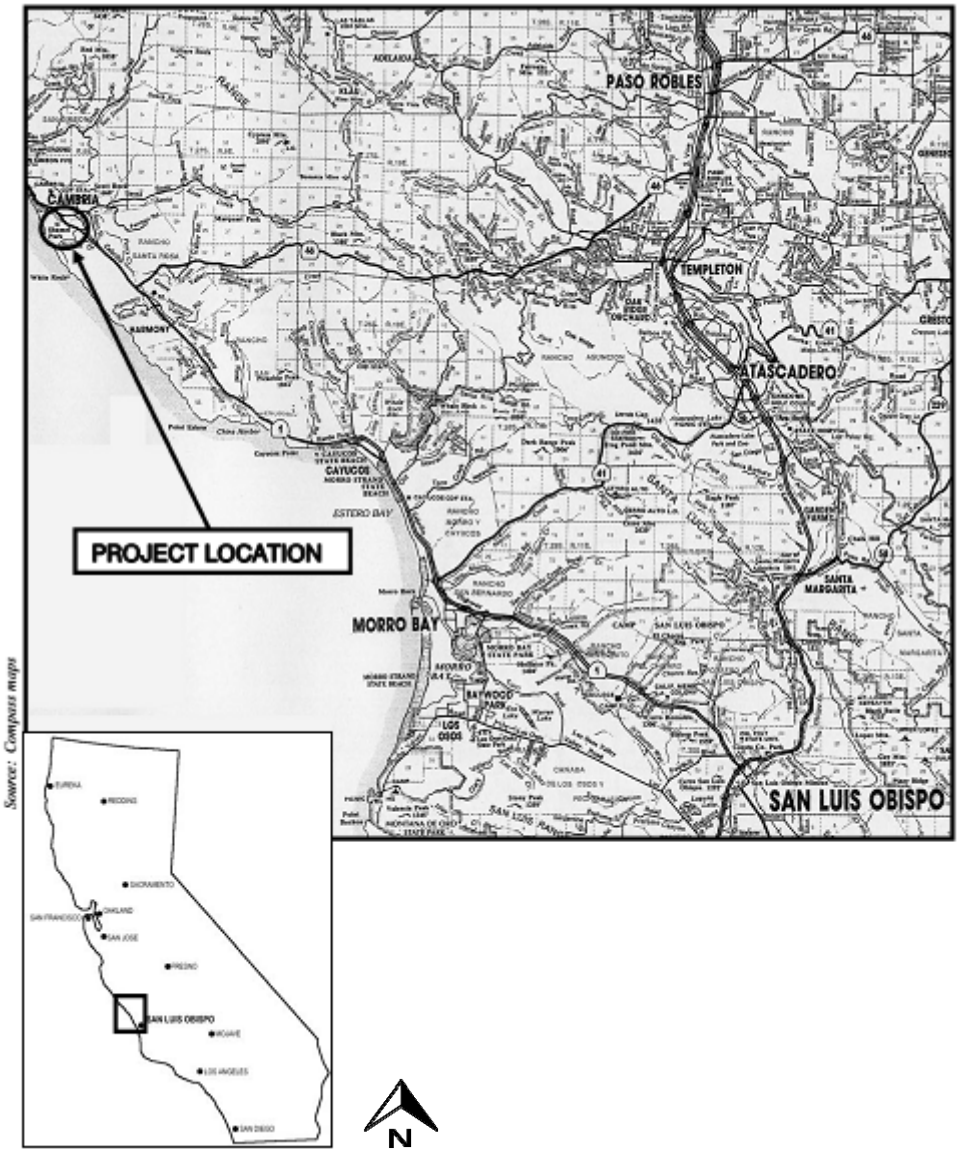


Figure 1. Project Regional Map (Source: Final Master EIR for the Fiscalini Ranch Preserve)

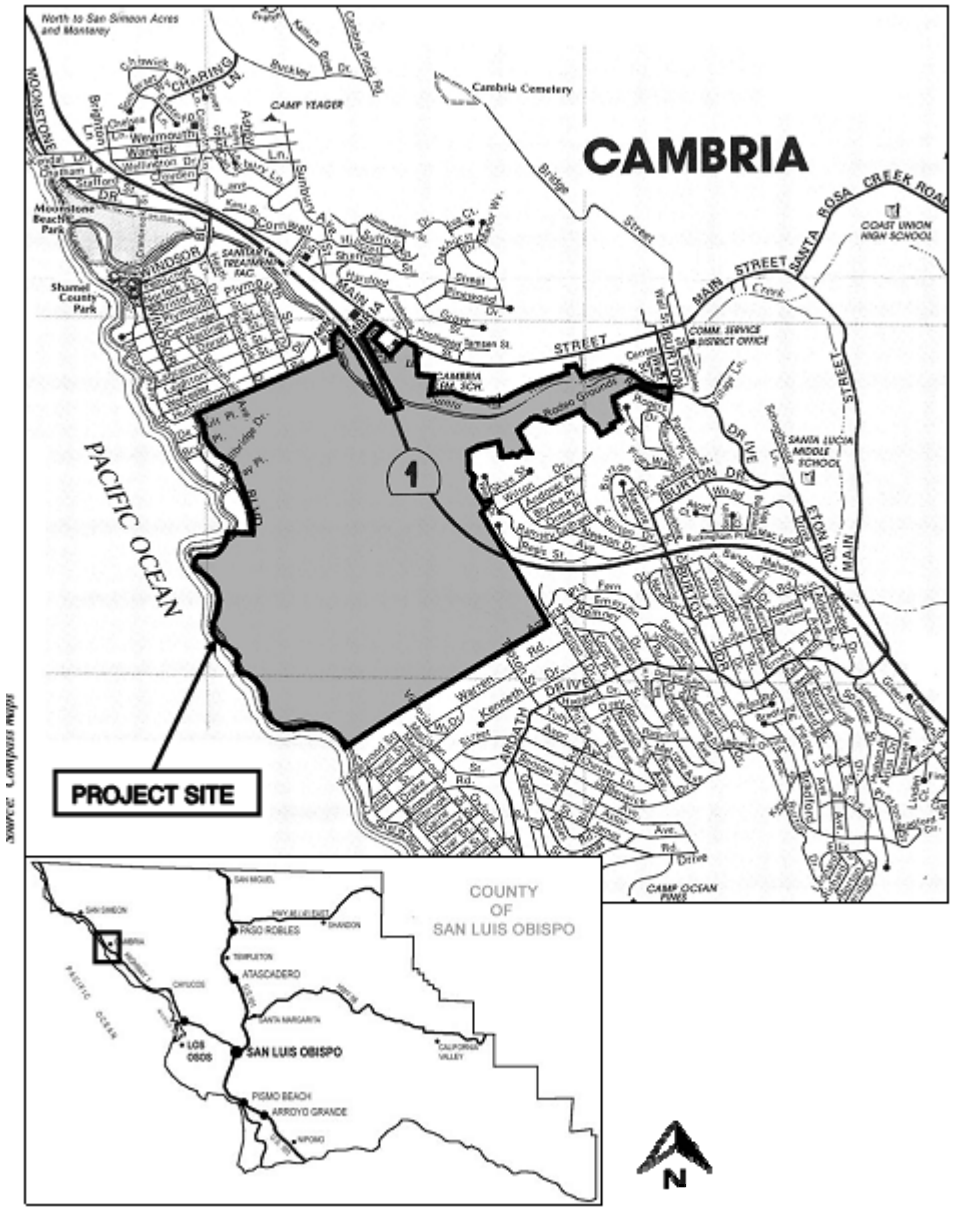


Figure 2. Project Vicinity Map (Source: Final Master EIR for the Fiscalini Ranch Preserve)

Introduction

The Fiscalini Ranch Preserve (hereafter referred to as "the Ranch") is a 430-acre natural open space located in the community of Cambria on the North Coast of San Luis Obispo County. The Ranch is named for the Fiscalini family, who owned the property for nearly a century, using it for successful dairying and cattle ranching operations. They sold the property in 1979 for tax reasons to speculators intent on building luxury homes and a commercial center. Rescued from development by forward-thinking individuals, the Ranch was purchased in 2000 by the

American Land Conservancy using a variety of funding sources. It has since become a treasured getaway for county residents and visitors alike. The Ranch features a remarkably varied landscape with over a mile of coastal bluff, grass covered hills, dense pine forest and a meandering creek lined with willows. The diversity of habitats creates a secure refuge for a rich array of wildlife, both rare and common. Cooper's hawks occasionally soar overhead, while coyotes patrol the ridges and migrating gray whales blow offshore. The extensive trail network offers opportunities to catch a glimpse of these animals, as well as an astounding display of flora, from majestic pines and gnarled oaks to fields of brilliant wildflowers to stream banks draped with a tangled web of ferns, vines and berries. The trails also offer chances to pause and take in spectacular views of the rugged North coast, stretching past San Simeon Point up to Piedras Blancas.

The Friends of the Fiscalini Ranch Preserve (FFRP) is a nonprofit organization that was originally founded to mobilize support for protection of the Ranch. We continue to support its protection to this day by hosting educational programs, raising funds for critical projects and coordinating volunteers for maintenance and enhancement projects. We hold the conservation easement on the Ranch and are responsible for making sure the terms of the easement, including public access and environmental protection, are respected in perpetuity. We are deeply committed to the on-going restoration and protection of the natural and cultural features of the Ranch and in helping the public to access, enjoy and understand everything the Ranch has to offer. The current proposal represents our most recent endeavor to enhance the natural resources on the Ranch by restoring the Monterey Pine Forest to health.

Background & Statement of Need

Many people are surprised to learn that the Monterey pine (*Pinus radiata*) forest found at the Ranch is quite rare. It occurs naturally in just 5 other locations in the world. It can be found in three places in California (Point Añ o Nuevo, Monterey Peninsula, Cambria), as well as on two islands off the Baja Peninsula in Mexico (Cedros, Guadalupe). The forest throughout its range also supports a unique complement of flora and fauna, including over 30 special status species. Estimates vary, but there are only about 12,000 to 16,000 acres of native Monterey pine forest left in the world – less than twice the size of Montana de Oro State Park. Unfortunately, most of the forest is in very poor condition including the stands in Cambria. Much of it has been lost or degraded over a century of selective logging, livestock grazing, fire suppression and development. More recently, invasive species and introduced pathogens, such as Pitch Canker, have weakened the forest even further. And in just the last few years, the extreme drought coupled with unusually warm temperatures have led to an epidemic of pine bark beetles (Ips sp. and Dendroctonus sp.) causing massive mortality.

The Cambria forest is 3,200 acres in size, with approximately 2,000 acres in open forest and 1,200 acres in developed, urban areas. The Ranch harbors about 70 acres of open forest, of which an estimated 20-40% of the trees are dead or dying. Many trees have already fallen, contributing to an unusually high volume of woody debris on the ground. Interspersed

Figure 3. The forest floor is littered with fallen trees.

within the debris are hundreds of stunted, crowded trees competing for limited water, nutrients and sunlight. A number of them are also besieged by pests, such as Dwarf mistletoe, Western gall rust and / or pine bark beetles. Aggravating the situation further, highly combustible alien plants, such as French broom and Blackwood acacia, are invading the area. In short, the stage is set for a catastrophic wildfire to occur unless immediate action is taken to reduce fuel loads in the forest.

A fire on the Ranch would pose a grave danger to lives and property. It is surrounded on three sides by development - Park Hill homes to the north, the neighborhood of West Lodge Hill to the south and the Cambria business district to the east. A fire on the Ranch could quickly spread into these adjacent areas forcing mass evacuations and threatening thousands of structures. The economic impact to Cambria residents and businesses could be in the millions of dollars. Alarmed by the level of risk, the San Luis Obispo Grand Jury recommended in March of this year that an extreme fire-risk emergency be declared. The Directors of the Cambria

Community Services District board followed up with a unanimous vote to declare a fire emergency later that month.

A catastrophic fire would threaten more than people, homes and businesses. It would threaten the forest itself. Monterey pines are killed by severe surface or crown fires. Intense burns can also incinerate the seed cones and any seed bank stored in the soil. Severe fires can damage the soil itself by consuming organic matter, volatizing nutrients, decreasing porosity and killing microorganisms and macroinvertebrates. Although the forest may eventually recover, it could take a very long time.

It is somewhat ironic that we find ourselves in the position of having to try so hard to prevent a major fire. One of the reasons why the forest has become so degraded is that it hasn't burned often enough. Monterey pines are adapted to periodic, low intensity fires. Their cones are "serotinous", remaining closed on the tree until temperatures are high enough to melt the resin that bonds the cone scales and allow them to open. Fire creates the optimum conditions for pine regeneration, causing a large number of cones to open and disperse their seeds into an open patch of soil cleared of competing plants. The evidence suggests that Native Americans set periodic fires in the forests in the past, resulting in burns every 20 to 40 years. Such fires burned grasses, shrubs, small trees and fallen needles and branches, but had little effect on large trees with thick insulating bark. The suppression of periodic fires often results in the growth of smaller, less fire resistant trees in dense stands, as well as a high number of senescent trees that have reached the end of their natural lifespan of 80-100 years. Overly mature and crowded stands are also more susceptible to beetle infestations and disease. This is precisely what has happened in the forest on the Ranch.

The urgent need to prevent catastrophic wildfire and protect public safety is the primary driver behind this proposal. However, it is important to note that it is definitely not the only one. There are several other reasons for taking action now to restore the health of the forest.

Monterey Pine is a conifer with a very limited native range that has been reduced by about half over time. The pine's scarcity has been recognized by a number of different organizations. It is on the World List of Threatened Trees, with the Guadalupe and Cedros stands classified as Endangered by the International Union for Conservation of Nature (IUCN). It is also listed as Rare and Endangered (List 1B) by the California Native Plant Society (CNPS). The California Department of Fish and Wildlife has added it their Special Plant List. The Nature Conservancy identified protection of the Cambria pines as one of five priority conservation initiatives for the County and secured a conservation easement over 200 acres of pines on the Covell Ranch in 2000.

If we lose the forest, we lose many of the plants and animals associated with it. The forest supports a rich understory of plants, including native grasses, annual wildflowers, assorted

Figure 4. Townsend's warbler (Brad Seek)

ferns and shrubs. Among the plants frequently seen in the forest are yerba buena, wild strawberries, wild hyacinth, fairy lanterns, yarrow, hedge nettle, honeysuckle, sticky monkeyflower, wild hyacinth, wood ferns, bracken ferns, blackberries, poison oak, wild current, coffeeberry and toyon. There are also several rare plants such as Cambria morning glory, Saint's daisy and Michael's rein orchid. The forest and associated plants provide food and cover for a wide variety of wildlife, from the diminutive California mouse to the intimidating mountain lion. As habitat provided by the forest declines, so will wildlife populations.

In spite of its small native range, Monterey pine is the most widely planted pine in the world. It is highly valued for its rapid growth and pulp qualities and supports a global multi-billion dollar lumber industry. It is a mainstay of the forest economy in many countries, including Australia, New Zealand, Argentina, Chile and the Republic of South Africa. California's forests are the primary reservoir for the genetic revitalization upon which such commercial enterprises ultimately depend for their long term success. As UC Davis forest geneticist, Deborah L. Rogers, noted "It is the accumulated potential, residing in the DNA that may be expressed in future generations. This potential may offer life-saving attributes in resistance to an insect or disease, ability to tolerate climatic changes, adaptability to changing soil conditions, or opportunity for new products. In short, genetic diversity may be considered part of the long term life insurance policy of a species. It is not a guarantee, but it offers potential."

Lastly, the Monterey pine forest has enormous aesthetic importance. It defines the very character of the Cambrian community. As Taylor Coffman noted in his book *The Cambria Forest*, the Monterey pines "distinguish the coastal area and especially the small town in its midst. Surrounded by the ocean and by open rangeland, the pines stand nobly alone, meanwhile drawing us toward them for a closer look. They have always been magnetic". The pines can be magnetic long into the future as well, if we take steps now to protect them and restore them to a healthy condition. We have forever changed the natural processes that originally shaped the forest, but we can mimic them through careful stewardship so the forest can endure long into the future.

Project Goals & Objectives

Many goals and objectives have been established for the Ranch since it was first acquired in the year 2000. This project is consistent with all of them. In at least some cases, the project represents the first major effort to realize the goals and objectives previously set forth for the Monterey Pine Forest.

The *Public Access and Resource Management Plan* was the first document to formalize goals and objectives for the pine forest. Drafted over several years and officially adopted by the Cambria Community Services District (CCSD) in April 2004, it sought to protect and enhance sensitive habitats and species throughout the Ranch, including the pine forest, while reducing risks to Ranch users and surrounding neighbor properties from fire and other hazards. It included recommendations for invasive plant eradication, gully stabilization, vegetation management and habitat restoration.

In April 2002, the *Cambria Forest Management Plan* was published. This plan addresses the management of Monterey pines throughout the community of Cambria and surrounding areas, including the Ranch. It was funded by the CCSD and prepared by the consulting firm of Jones & Stokes. The plan sets forth a number of goals and objectives to improve forest health, maintain biological diversity, reduce hazards to life and property, and maintain and enhance forest aesthetics, as well as recommending measures by which the goals can be achieved.

The *Final Master Environmental Impact Report* for the Fiscalini Ranch Preserve was approved in September 2009 and reaffirmed the goals of implementing habitat restoration activities and promoting stewardship of natural resources throughout the Ranch.

Finally, James P. Allen and Associates, consulting arborists, prepared a summary report of forest conditions and management recommendations for the Friends of the Fiscalini Ranch Preserve in May of 2014. The report, titled *Fiscalini Ranch Monterey Pine Forest Analysis Maintenance and Monitoring Program,* upheld previous visions for the forest and prescribed specific measures for achieving them.

The current proposal aims to incorporate all of the aforementioned goals and objectives into a comprehensive action plan that we can implement on the ground. Generally speaking, the goal of this project is to enhance public safety and forest health by reducing fuel loads in the Monterey pine forest in a manner that protects and enhances the sensitive biological and cultural resources found onsite. More specifically, the project is designed to achieve the following goals and objectives:

1. ***Reduce hazards to life and property within and around the forest***
    a. Selectively remove dead and dying trees and accumulated woody debris on the forest floor to reduce the risk of catastrophic wildfire

b. Remove trees and limbs that present a hazard to people using Ranch amenities, such as trails and benches

2. Improve overall forest health

a. Strive to mimic the outcomes that would result from the low intensity, periodic fires to which the Monterey pine forest is adapted using mechanical means
b. Maintain an uneven-aged stand, by retaining a representative mix of seedlings, saplings, pole-sized and mature trees
c. Selectively thin crowded stands of saplings and pole sized trees in order to provide sufficient resources (e.g. light, moisture, nutrients) for continued healthy growth of most vigorous specimens
d. Remove diseased / infested branches (e.g. Western gall rust, Dwarf mistletoe) on otherwise vigorous young trees to promote their recovery

3. Encourage the regeneration and expansion of the forest

a. Protect existing seedlings by flagging them and instructing workers to practice avoidance to the extent practicable during project activities
b. Scatter cones and plant pine seedlings in areas with extensive tree, debris and / or invasive removal
c. Scatter cones and plant pine seedlings on the forest edge to replace forest acreage lost years ago to logging and development

4. Maintain/enhance habitat for native plants and wildlife

a. Protect existing wildlife habitat by reducing the threat of stand replacing wildfire which could potentially destroy it
b. Safeguard wildlife by conducting habitation surveys before project activities begin and retain non-hazardous trees providing habitat for wildlife
c. Eradicate invasive plant species that are displacing native plants and the wildlife they support
d. Plant a variety of native shrubs, forbs and grasses in areas with extensive tree, debris and / or invasive removal to accelerate natural regeneration of an understory with high structural and species diversity
e. Enhance biological diversity by propagating rare plants to increase populations on site (e.g. Cambria morning glory) and expanding range by introducing rare species suited to site conditions (e.g. Hickman's onion)
f. Retain large snags and logs for wildlife habitat and nutrient cycling

5. ***Maintain and enhance aesthetic values of the forest***

a. Remove trees, ladder fuels and woody debris only to the extent necessary to insure public safety and forest health in an environmentally sensitive manner
b. Factor aesthetics into project decisions, such as plant palettes, revegetation plans, snag retention, etc.

6. **Improve understanding of the ecology, restoration, and stewardship needs of the Monterey pine forest among Cambrians and the broader public**
    a. Increase knowledge of the historical role of in Monterey pine ecosystems and demonstrate how periodic thinning can benefit forest health
    b. Improve understanding of the Monterey pine plant community and the ecosystem services they provide
    c. Increase familiarity with invasive plants found locally, their impacts, how they spread and how the public can help control them
    d. Cultivate a stewardship ethic by encouraging more people to participate in forest restoration and monitoring activities

Project Implementation

Approximately 50 acres of pine forest will be treated during this project, providing sufficient funding can be obtained. The majority of the acreage is located in Management Unit B, as identified by James Allen in his *FFRP Monterey Pine Forest Analysis*. A small portion of the project spills over into Management Unit A1. The project encompasses most of the forest surrounding the Forest Loop Trail.

Allen recommended conducting trials using three different treatment methods to determine which approach proved to be most cost effective and yielded the best results. He mapped three test plots roughly one acre in size and identified three separate treatments to apply to each: Test Plot 1 - Cut / Lop / Scatter; Test Plot 2 - Cut / Pile / Burn; Test Plot 3 - Cut / Pile / Chip. After the test plots are completed, the most successful treatment will be applied to the balance of the project acreage.

The project will be implemented in 5 phases:

1. Conduct pre-project monitoring
2. Reduce fuel loads
    a. Remove hazardous trees, including CCSD parcel
    b. Reduce test plot fuel loads
    c. Reduce remaining fuel loads
3. Remove invasive plants
4. Replant native vegetation
5. Conduct post-project monitoring

Conduct Pre-project Monitoring

The *FFRP Monterey Pine Forest Analysis* recommends fully documenting current conditions in the project area before applying any treatments so as to develop a baseline to evaluate project success. The analysis further recommends recording all monitoring data in standard formats (e.g. database, GIS, photographs) that allow for comparisons between pre- and post-treatment conditions over time. The continuous collection of data will document successional changes,

growth and overall forest health and will provide a basis for future management decisions. Some of this work was completed as part of the development of this MUP application. The test plots have been staked out in the field. The dimensions and locations of each plot have been recorded and mapped. Forest resources are being assessed for tree and crown condition, species composition, density and distribution, abundance of snags and coarse woody debris, regeneration and number of trees within each plot. Special status plant species will be flagged and mapped.

Before starting any fuel reduction activities, additional surveys will be conducted by qualified personnel to avoid disruption to wildlife. Any nesting birds, woodrat houses and/or overwintering monarchs in the project area will be identified. If sensitive wildlife are found, an appropriate buffer will be established to insure their protection. The size of the buffer will be determined by a qualified biologist based on the species, topography, vegetation and type of activity proposed for the area. The buffer perimeter will be delineated with survey tape and temporary signage. In the case of nesting birds, the buffer may be eliminated after the young have fledged. The tree housing the nest will be flagged for retention as nests are often reused, unless it is deemed hazardous to public safety. Buffers established for protection for woodrat houses and overwintering monarchs will remain in place for the life of the project and beyond. Woodrats utilize their houses indefinitely. Similarly, buffers established for overwintering monarchs should ideally be retained as long as they utilize the site. The butterflies are dependent upon the environmental conditions created by an aggregation of trees (e.g. light, wind, temperature, humidity), understory vegetation and topography. The modification of any of these components in the vicinity of a monarch overwintering site, even if monarchs are not present, should be avoided unless public safety would be compromised. Modifications to the overwintering site should only be undertaken after consultation with a qualified entymologist and may involve mitigation, such as planting additional vegetation.

Reduce Fuel Loads

Remove Hazardous Trees

In order to protect public safety, an Emergency Permit (ZON2014-00693) was obtained from the County on October 22, 2015 authorizing the removal of up to 300 hazardous trees on CCSD properties. Hazardous trees were defined as dead trees that posed an immediate threat of falling on utility lines, homes or other structures, as well as trails and benches used by visitors on the Ranch. The Ranch manager and Calfire teams identified and flagged 190 trees, of which 156 trees were located on the Ranch and 34 on the adjacent CCSD property behind the wastewater treatment plant. The trees were all felled in late October and early November using hand crews.

Reduce Test Plot Fuel Loads

The first step in preparation for fuel reduction activities will be identifying the boundaries of the test plots on the ground. A Registered Professional Forester (RPF) will then survey the treatment areas to identify which trees should be kept and which should be removed. They will first identify any large dead and dying trees that should be felled or topped. They will also assess whether they can be felled by ground crews or whether they must be brought down in sections (topped) to avoid damage to surrounding vegetation or structures. Trees to be retained as snags for wildlife will also be identified at this stage. At least 4 snags will be retained per acre, with at least 2 greater than 20 inches in diameter and over 20 feet. All branches will be removed from snags so as to reduce fire hazard. All trees will be marked according to the treatment they will receive. Logs will also have their branches removed and laid flush to the ground to minimize fire hazard.

Figure 5. Crowded conditions

The next step will be to review ladder fuels, woody debris and overcrowded conditions that need to be dealt with. The Forester will identify trees that need to be limbed up, as well as vegetation and woody debris that should be removed to prevent fire from moving into the canopy. In the case of woody debris, there are a number of areas where these materials have accumulated at excessive rates and are actually suppressing growth of new vegetation. Much of this material will be flagged for removal regardless of whether it could be a ladder fuel. Finally, the Forester will review areas that require thinning and flag all trees to be retained with survey tape. The goal will be to keep the healthiest, well-shaped trees of all sizes, including seedlings, saplings and pole-sized pines and oaks, at an average stem spacing of 10-15 feet apart.

The actual removal of all materials will be done by crews using chainsaws and hand tools. Disposal of the resulting debris will be handled in a variety of ways. Large logs will be left in place to provide wildlife habitat, nutrient cycling and moisture retention.

Smaller materials, such as saplings, branches and shrubs will be disposed of onsite using three different methods. We will evaluate which approach is the most effective in terms of cost,

time, community reaction and ecological results. This information will be factored into plans for maintaining the forest in the future. The three techniques that will be used are as follows:

1. **Cut / Lop / Scatter:** This approach involves cutting trees and branches into 3 to 6 foot lengths and scattering them evenly over an area. The pieces should lie relatively flat on the ground and only be 1-2 feet in height. This insures that they decompose readily and contribute nutrients to the soil.
2. **Cut / Pile / Burn:** This technique involves creating piles of woody debris approximately 8-10 feet in diameter and 4 feet high consisting of small trees, branches, tops, brush, etc. Piles are typically located in meadows or openings in the forest at least 10 feet away from trees / shrubs and several hundred feet from any structures. The piles are ignited during the winter and monitored during the burn. The piles are thoroughly extinguished when they have finished burning. All pile burns will be conducted only on permissive burn days, permitted through the San Luis Obispo Air Pollution Control District (SLOAPCD) and supervised by CalFire.
3. **Cut / chip:** Chipping is another effective way of dealing with woody debris up to 12 inches in diameter. Chipping reduces materials into chips approximately one inch square by one-quarter inch thick. Some chips will be spread on trails to protect tree roots and reduce dust. Others will be used to build water basins for new vegetation and aid in plant development. And still others will be spread in a thin layer on the forest floor to gradually decompose.

Reduce Remaining Fuel Loads

After fuel reduction activities in the test plots are completed, the success of each treatment will assessed. The treatment deemed most effective will be applied to the balance of the project area. The plots will be reassessed at the end of one year and the selected treatment revised for future applications, as needed.

Remove Invasive Plants

Figure 7. French broom in forest.

The primary invasive species of concern in the project area is French broom (Genista monspessulana) as it continues to persist in spite of previous control efforts. It is found in two locations within the project site – near the Trenton entrance and at the northeast corner of Management Unit B. It is a very aggressive invader, forming dense stands that exclude native plants and wildlife. It is also highly combustible

and can reach heights of 10-16 feet, creating ladder fuels that can carry fire into the forest canopy. French broom produces copious amounts of seed which can remain viable in the soil for decades. For all of these reasons and more, French Broom has been given the highest severity rating by the California Invasive Plant Council (CAL-IPC).

French broom will be removed largely by volunteers working under the supervision of the Project manager. Many of the infestations are mostly composed of small seedlings that have sprouted since previous removal efforts. Large dense patches that are relatively free of desirable plants will be weed whipped in spring and sprayed with herbicide in the fall. We will use Milestone™ (Aminopyralid Triclopyr) which is a low toxicity, selective herbicide that has been shown to be effective on broom seedlings. Any plants located within 50 feet of the seasonal wetland or gully, as well as seedlings that are mixed in with native vegetation will be removed by hand. Larger plants up to an inch in diameter will be removed using weed wrenches. Very large plants will be cut and glyphosate will applied to the stumps. Plants without seeds will either be left in place or shredded. All foliage with seeds will either be piled and burned or taken to the landfill to minimize seed dispersal.

There are several other invasives on the site that aren't as noxious, nor as widespread, that will also be removed, including black acacia (Acacia melenoxylon), jubata grass (Cortaderia jubata) and orchard grass (Dactylis glomerata). These will all be treated using a combination of mechanical (cutting) and chemical (herbicide spray) techniques. Invasive plants will be treated prior to seeding whenever possible, but any seed stalks present will be bagged for removal or burned on site.

Replant Native Vegetation

Replanting activities will be limited in scope for this project. We anticipate that natural regeneration will be sufficient to replace trees in most areas. Assisted regeneration will be reserved primarily for areas in which large numbers of trees or invasive plants are removed during the project leaving sizable areas of unprotected soil and understory. The objective will be to speed the regeneration of desirable plants and prevent colonization by invasives. We will rely primarily on scattering cones and seeds for regeneration of pine trees within the forest. Cones will be collected from a number of healthy trees, preferably within or close to the management unit where they will be scattered so as to ensure selection of stock that is adapted to the particular microclimate. Cones will be heated in the sun to open them prior to scattering them evenly at the site. In large areas where aggressive invasives such as French broom have been removed, we will plant 1-gallon containers of understory plants to give the natives a competitive advantage. All plants will be grown from seed collected onsite or nearby and contract-grown locally. We will also apply 4 inches of mulch at the time of planting as this

has been found to inhibit broom seed germination. The understory species to be planted are listed in Figure 8**.**

Figure 8. Native Plant Species

Type	Common Name	Scientific name	Status
Herbaceous	Cambria morning glory	Calystegia subacaulis ssp episcopalis	CNPS 4.2
Herbaceous	Common Yarrow	Achillea millefolium	
Herbaceous	Hickman's onion	Allium hickmanii	CNPS 1B.2
Herbaceous	Kellog's horkelia	Horkelia cuneata var sericea	CNPS 1B.2
Herbaceous	Pacific blackberry	Rubus ursinus	
Herbaceous	Saint's daisy	Erigeron sanctarum	CNPS 1B.2
Herbaceous	Yerba buena	Satureja douglasi	
Shrub	Coffeeberry	Rhamnus californica	
Shrub	Flowering current	Ribes sanguineum var. glutinosum	
Shrub	Gooseberry, fuchsia flowering	Ribes speciosum	
Shrub	Sticky Monkeyflower	Mimulus aurantiacus	
Shrub	Toyon	Heteromeles arbutifolia	

Container stock will also be used to plant pine seedlings in areas designated for forest expansion. The seedlings will be grown from seed collected onsite from asymptomatic, healthy trees and also contract-grown locally. All container plants will be thoroughly watered at the time they are planted with water that is trucked to the site. We are optimistic that pine seedlings planted as part of this project will not require additional irrigation, as previous planting projects on the Ranch have succeeded using this approach. We are less confident about the understory plants, only because we haven't planted them on the Ranch before. We plan to hand water them quarterly for the first year.

All planting will be scheduled to occur in early winter to take advantage of seasonal precipitation and cooler temperatures. New plants will also be mulched and weeded regularly to conserve moisture.

Post-project Monitoring

The *FFRP Monterey Pine Forest Analysis* also recommends monitoring treated areas immediately following forest treatments and at six-month intervals thereafter. The initial inspection will insure treatment prescriptions were executed properly and that the short-term goals for the treatment were met. Many of the pre-project monitoring surveys (e.g. plant condition, diversity, density) will be repeated and photographs will be retaken from the same fixed points to document the modified conditions. New surveys will be added to monitor the vigor and survivorship of new plantings, with a goal of 70% survival over 5 years. In addition, areas where invasive species have been removed will also be monitored and maintained to insure any subsequent growth retreated. It is especially important to insure French broom is never allowed to go to seed so the long-lived seed bank can be depleted.

Project Schedule

The project schedule is tentative, pending permit approvals and the acquisition of funding for all project activities. We anticipate requesting a renewal of the initial two-year permit, so the project will extend over a 3-4 year period. It began in Summer 2015, with the submission of the permit application. Hazardous tree removal took place in Fall 2015, after receipt of emergency permits. We anticipate the balance of fuel reduction activities to begin in Summer 2016 and for the project to fully be completed by late 2018 / early 2019. Public outreach will be conducted in tandem with permit processing to help insure that any concerns are addressed prior to the start of the project in the field. A tentative schedule is included in the appendix.

Environmental Setting

Hydrology

The project area is located well above the flood plain in an area characterized by flat to gently sloping terrain. Thinning of the forest could slightly increase surface runoff, but not to the point of significantly altering existing drainage patterns or increasing erosion, on- or off-site. All of the large trees, vigorous saplings and most of the understory will remain intact and will continue to absorb winter rains. Most of the work will be done using hand crews during the dry season, thereby minimizing surface runoff associated with soil compaction. Mulch from chipping of small trees and branches will be distributed along trails to further reduce the potential for runoff.

There is also a small seasonal wetland within the pine forest that is dominated by a mixture of low-growing herbaceous species such as rushes and blackberries. Neither pine trees nor invasive plants targeted for removal grow in this seasonally ponded area, so the wetland will not be impacted by project activities. The wetland will be cordoned off with flag tape when work is performed in adjacent areas to discourage workers from walking through it.

Soils

As noted by Cleath and Associates in the *Fiscalini Ranch Preserve Master EIR*, there are three soil types found in the project area, all variants of San Simeon sandy loam differentiated by slope:

199 San Simeon sandy loam, 2 to 9% slopes
201 San Simeon sandy loam, 15 to 30% slopes
202 San Simeon sandy loam, 30 to 50% slopes

San Simeon sandy loams are moderately deep, well drained soils formed from weathered sandstone. They are typically found at 20 to 500 feet above sea level and are classified as

moderately erosive (.24). They are characterized by a grayish to yellowish brown surface layer about 2 feet thick, with a deep brown, mottled clay subsurface layer to depths of 34 inches. The clay subsoil restricts root penetration, resulting in a relatively high incidence of trees being uprooting during high winds. This partially accounts for the high volume of woody debris currently found in the understory.

Biological Resources

The Ranch supports a diverse set of biological communities, and is home to sensitive special status species of both animals and plants. Detailed surveys and reports have been created for the site by SWCA Morro Group for previous studies and are summarized here. Tables V-5 and V6 listing special status plants and wildlife potentially present are included in the appendix.

Special Status Communities

The proposed project takes place entirely within a native Monterey Pine Forest, which is designated as an Environmentally Sensitive Habitat Area (ESHA) by the San Luis Obispo County Coastal Zone Land Use Ordinance (CZLUO), Land Use Element, and Local Coastal Plan. The forest is characterized by an overstory dominated by semi-closed cone Monterey pine *(Pinus radiata),* interspersed with occasional Coast live oaks (*Quercus agrifolia*). The understory varies from a multistoried array of shrubs and herbaceous plants, to relatively barren areas consisting largely of pine needle duff. Common understory shrubs include toyon (*Heteromeles arbutifolia*), coffee berry (*Rhamnus californica*), poison oak (*Toxicodendron diversilobum*) and sticky monkey flower (Mimulus aurantiacus). Common herbaceous plants include California blackberry (*Rubus ursinus*), hedge nettle (*Stachys bullata*), common yarrow *(Achillea millefolium)* and wood fern *(Dryopteris argute).*

Special Status Plant Species

SWCA Morro Group considered 27 special status plant species during preparation of the Master Environmental Impact Report for the Fiscalini Ranch Preserve on the basis of CNDDB records, site surveys and anecdotal reports. They noted that many of species listed in the CNDDB have highly specialized habitat requirements that are not found on the Ranch (e.g. salt marsh, chaparral and serpentine outcrops). However, suitable habitat conditions do occur for thirteen of these species and many of them have been observed directly in the field. Most are not adapted to Monterey pine forest habitat and will not be impacted by this project. The most obvious exception is the Monterey pine itself which is classified as rare, threatened, or endangered (1B.1) by the California Native Plant Society (CNPS).

Additional special status plants which may be present in the pine forest are Michael's rein orchid (*Piperia michaelii*) and Saint's daisy (*Erigeron sanctarum*). Cambria morning glory (*Calystegia subacaulis* ssp. *episcopalis*), has been observed on the midden, but nowhere else.

Gairdner's yampah (*Perideridia gairdneri* ssp. *gairdneri*) was observed in 1993, but has not been seen in subsequent surveys. Hickman's onion (*Allium hickmanii)* has not been observed to date on the Ranch, but is found in similar habitat conditions in Arroyo de la Cruz.

Eight plants have been added to the CNDDB since SWCA Morro Group conducted their studies for the EIR. None of these plants have been observed on the Ranch and most are associated with plant communities (e.g. coastal bluff, grassland, serpentine) other than those associated with Monterey pine. Although California bedstraw is found on the Ranch, the rare subspecies *luciense* is typically found at higher elevations in the Santa Lucia Range.

Special Status Wildlife Species

The Master EIR also identified 17 sensitive animal species that should be considered potentially present on the Ranch due to suitable habitat conditions. This determination was based on a review of CNDDB records, applicable literature, field surveys and anecdotal reports. In addition, the Grasshopper sparrow (Ammodramus savannum) and Foothill yellow-legged frog (Rana boylii) have been added to CNDDB for the Cambria area since the Master EIR was prepared. In addition, USFWS recently announced that they are initiating a status review of the monarch butterfly to determine whether federal listing is warranted under the Endangered Species Act (ESA). The majority of special status species listed are not found in Monterey Pine Forest habitat lacking perennial streams, including the new listings. The Monarch butterfly (*Danaus plexippus plexippus*) and Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) are definite exceptions and do use the forest. In addition, sensitive bird species, such as white tailed kites (*Elanus leucurus),* may use the pine forest and edge areas for feeding, nesting and cover. Avoidance measures have been incorporated into the project to insure special status species are not impacted by any activities.

Cultural Resources

The Fiscalini Ranch is located within the central California region historically occupied by the Obispeño Chumash and their ancestors for over 9,000 years. The Ranch was surveyed in 1994 by Clay Singer, and his results were documented in the *Cultural Resources Survey and Impact Assessment for the East West Ranch Project in Cambria, San Luis Obispo, California* (Singer, 1995). This report

Figure 9. Soil at midden with shell fragments.

is confidential and available upon request. The surveys documented the presence of twelve archaeological sites on the west side, including prehistoric shell midden deposits; a series of rock ovens and small middens; bedrock mortars; chert flakes; and stone tools and cores. One archeological site is present within the project area (CA-SLO-367) and three sites are located in close proximity to the project area (CA-SLO-1655, CA-SLO-1656, CA-SLO-369). The site within the project area contains a prehistoric shell midden (CA-SLO-367). It is located in a small, open meadow surrounded by forest. The midden does not contain any trees that require treatment and can therefore be avoided. However, care will be taken to route worker and equipment access routes away from the midden area to prevent any disturbance. Similar avoidance measures will be taken for the sites outside the project area. In addition, these areas have been excluded from revegetation plans to avoid soil disturbance.

Figure 10. Foundation of old creamery building

Singer also identified three historic sites on the Ranch during the 1994 survey including the remains of a small structure and associated refuse, water pumping facility, creamery, a historic ranch complex, and a Chinese seaweed farm. The complex includes houses, sheds, and other structures. Some of these remains are still quite visible and can be found on the edge of the forest. They will not be impacted by the project, due to the fact that the forest in these areas is relatively healthy and not targeted for treatment.

Regulatory Setting

1. **California Department of Fish and Wildlife (CDFW):** The California Department of Fish and wildlife has jurisdiction over special status plants and animals that can be found onsite. CDFW will be consulted during the permitting process.
2. **San Luis Obispo (SLO) County:** A Minor Use Permit will be required for this project from the County of San Luis Obispo. Since the project falls within the Coastal Zone it will require a Coastal Add-On and a longer review period. As a part of the process for

obtaining the Minor Use Permit, the project will be reviewed per the California Environmental Quality Act (CEQA).

3. **SLO Air Pollution Control District (APCD):** A Smoke Management Permit (SMP) will be required to conduct pile burns during the winter. An application will be submitted well in advance of the desired burn date.
4. **SLO County Agriculture Commissioner:** An Operator's permit is required to apply herbicides on invasive species. FFRP and CCSD each have valid permits.
5. **US Fish and Wildlife Service:** The project will not impact any federally listed species.

Avoidance, Minimization & Monitoring Measures

The following measures will be incorporated into the project to avoid or minimize impacts to sensitive resources. These measures will be implemented where applicable and as needed depending on site conditions at the time of fuel reduction and restoration activities.

1. **Avoidance of Sensitive Wildlife:** Project activities will be restricted during the spring months in order to reduce potential impacts to sensitive vegetation and wildlife. Activities during this period will primarily consist of documenting existing conditions and flagging sensitive resources:
    a. *Identify / flag woodrat houses***:** The Monterey dusky-footed woodrat is a Species of Special Concern with the California Department of Fish and Wildlife. The project area will be surveyed for woodrat houses and an avoidance perimeter of 50 feet established with caution tape prior to starting fuel reduction activities.
    b. *Survey for monarch butterflies:* The U.S. Fish and Wildlife Service announced in December 2014 that it would begin a year-long review of the monarch butterfly's protection status. Monarch butterflies have been known to overwinter on the Ranch in the past. There is no danger of removing a roosting tree due to the fact that we only plan to remove trees that are dead or too small for that purpose. However, since removal of vegetation (e.g. ladder fuels, small trees) adjacent to overwintering areas can adversely affect use of the sites, we will conduct a professional survey for monarchs during the 2015-2016 overwintering season and avoid disruption to their area if any are found. The survey will be furnished to the County and recommendations will be incorporated into the project. A California Native Field Survey Form will be submitted to the California Department of Fish and Wildlife (CDFW).
    a. *Survey for nesting birds:* If feasible, fuel reduction activities will be delayed until September 1st to avoid the general bird breeding season (February 1 through August 31). Regardless, a nesting bird survey will be conducted by a qualified

biologist two weeks before work begins to minimize potential for disruption. If no nesting activities are detected within the proposed work area, fuel reduction activities may proceed. If nesting activity is confirmed during preconstruction nesting surveys or at any time during tree removal, work activities shall be delayed within 500 feet of active nests until the young birds have fledged and left the nest. If a white-tailed kite nest is found, CDFW will be consulted immediately to determine an appropriate course of action. The results of the surveys will be forwarded to the CDFW, possibly with recommendations for buffer zone changes, as needed, around individual nests as directed by the Ranch Master EIR. Copies will also be forwarded to the County.

2. **Avoidance of Sensitive Vegetation:**

   a. *Monterey pine:* Monterey pine has been assigned a global (G1) and state ranking (S1) of "Critically imperiled" by CDFW. The pine is the focal species for this project and therefore will not be avoided. Our goal is to improve the overall health of the pine forest and reduce the potential for a catastrophic wild fire which could destroy the entire stand. We will only be removing large trees that are dead and dying, as determined by a Registered Professional Forester, and thinning stands of overcrowded small trees. Large trees that could damage adjacent healthy trees will be brought down in sections. Studies have shown that crowded conditions stress young trees due to the competition for resources and lead to increased susceptibility to insect and disease attacks and/or mortality. We will also be removing dwarf mistletoe and western gall rust on young trees to give them a better chance of succeeding and reduce the prevalence of these pests. The removal of excessive woody debris should improve pine germination by freeing up space on the forest floor. Lastly, the scattering of cones and planting of pines on the forest perimeter should help increase the number of pines found on the Ranch. In view of these actions, we anticipate the project will have beneficial rather than adverse impacts Monterey pines and no protection measures are proposed for this species.

   b. *Survey for sensitive plants:* Three additional sensitive plant species (Michael's rein orchid, Saint's Daisy and Cambria morning glory) have been observed in the forest. Saint's daisy and Cambria morning glory are the only ones present in the project area. These are typically dormant by August, but the area will be surveyed and if plants are found they will be flagged, as a precaution. The results of the survey will be recorded in the Calflora database and forwarded to the County.

3. **Avoidance of Seasonal Wetland:** This area is not formally identified as a wetland in the FRP Master EIR, but a number of wetland species are present. It rarely contains

standing water, but only exhibits wet, spongy conditions during the rainy season. It will be dry by the time any potentially damaging activities begin and no fuel reduction, invasive species removal or planting is planned for the area. It will be cordoned off with caution tape. Indirect impacts to the wetland are not anticipated, due to the fact that ground vegetation, stumps and soils will remain intact in the project area.

4. **Avoidance of Cultural Resources:** No fuel reduction, invasive species or planting is planned for areas containing sensitive cultural resources. Project staff and volunteers will be instructed to use prescribed access routes which avoid these resources for transit between project treatment areas.

5. **Minimize Access Impacts:** Trails will need to be closed when crews are felling trees nearby for public safety. We will post planned closure schedules on our web site and at the trailhead (s) one week in advance. The majority of trails on the Ranch will not be affected.

6. **Minimize Soil Impacts:** Potential impacts to soils will also be minimized by scheduling project activities to take place during the summer and fall. Trees will be felled by hand crews using chainsaws. The only heavy equipment anticipated is a chipper. It will be delivered by truck on a service road and staged on the road. Disturbance areas will be minimized to the maximum extent practicable, thus reducing the total area of soil exposed to potential erosion. Native vegetation will be protected where feasible. Where large patches of invasive species are removed, the soil will be stabilized with replanting of native plants.

7. **Pathogen Control:** The proposed project is within the designated Pitch Canker Zone of Infestation established by the Board of Forestry. The project has incorporated guidelines developed to control the spread of pitch canker including sanitation of tools and equipment, keeping logs onsite and chipping / burning infected woody debris.

8. **Invasive Species Control:** Tools and equipment will be inspected for contamination by invasive plant seeds and cleaned before they are brought into the project area. All plant materials will be inspected upon delivery and any weeds removed. Invasive plants removed with seed heads will be disposed of in a dumpster to be taken to a landfill. Project staff and volunteers will be instructed to inspect their clothing for weed seeds before accessing non-infested areas.

9. **Pollutant Control:** Cleaning, fueling and maintenance of equipment and vehicles will be performed offsite or at designated staging areas located near street entrances at Windsor, Trenton, Tipton or Warren. All herbicide mixing and filling will be performed offsite or within designated staging areas as well. The staging areas shall conform to standard Best Management Practices applicable to attaining zero discharge of

stormwater runoff. No maintenance, cleaning, or fueling of equipment shall occur within the seasonal wetland or Trenton gully, or within fifty feet of such areas. At a minimum, all project equipment and vehicles shall be checked and maintained on a daily basis to ensure proper operation and to avoid potential leaks or spills. All project-related spills of hazardous materials within or adjacent to project sites shall be cleaned up immediately. Spill prevention and cleanup materials shall be on-site at all times during construction.

References

Allen, James P. & Associates. 2014. *Fiscalini Ranch Preserve Monterey Pine Forest Analysis Maintenance and Monitoring Program.* Prepared for the Friends of Fiscalini Ranch Preserve. Santa Cruz, CA.

Bottoroff, Jim. 2009. *Snags, Coarse Woody Debris and Wildlife.* Washington State Department of Natural Resources. Olympia, WA.

Brown, Rick. 2002. *Thinning, Fire and Forest Restoration: A Science Based Approach for National Forests in the Interior Northwest*. Defenders of Wildlife. Linn Falls, OR.

California Department of Forestry and Fire Protection (CALFIRE). 2011. *Final Initial Study/Mitigated Negative Declaration for the proposed Bridge Street Fuel Break Project San Luis Obispo County.* Sacramento, CA.

California Department of Fish and Wildlife. 2015. California Natural Diversity Database (CNDDB) *Endangered, Threatened and Rare Plants List.* Accessed June 2015. Available at: https://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp

California Department of Fish and Wildlife. 2015. California Natural Diversity Database (CNDDB) *Special Animals List.* Accessed June 2015. Available at: https://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp

Campbell, Marti. 2012. *Benefits of Forest Restoration: Literature Review.* Prepared for the Coalition for the Upper South Platte. Lake George, CO.

Coffman, T. 1995. *The Cambria Forest: Reflections on Its Native Pines & Its Eventful Past.* Cambria, CA: Coastal Heritage Press.

Jones & Stokes. 2002. *Cambria Forest Management Plan.* Prepared for the Cambria Forest Committee. Cambria, CA.

Morro Group / SWCA Environmental Consultants. 2009. *Final Master Environmental Impact Report for the Fiscalini Ranch Preserve.* San Luis Obispo, CA.
RRM Design Group. 2003. *East-West Ranch Public Access & Resource Management Plan*. Prepared for Cambria Community Services District.

Oneto, S. R. Oneto, J. M. DiTomaso and G. B. Kyser. 2009. *Brooms: Integrated Pest Management for Home Gardeners and Landscape Professionals.* University of California at Davis. Davis, CA.

Pitch Canker Task Force. *Guidelines for Handling Woody Material Infested with the Pitch Canker Fungus.* Accessed June 2015. Available at: http://ufei.calpoly.edu/pitch_canker/management.lasso?guidelines#info

Rogers, D.L. 2002. *In situ genetic conservation of Monterey pine (Pinus radiata D. Don): Information and recommendations.* Report No. 26. Genetic resources Conservation

References

Allen, James P. & Associates. 2014. *Fiscalini Ranch Preserve Monterey Pine Forest Analysis Maintenance and Monitoring Program.* Prepared for the Friends of Fiscalini Ranch Preserve. Santa Cruz, CA.

Bottoroff, Jim. 2009. *Snags, Coarse Woody Debris and Wildlife.* Washington State Department of Natural Resources. Olympia, WA.

Brown, Rick. 2002. *Thinning, Fire and Forest Restoration: A Science Based Approach for National Forests in the Interior Northwest*. Defenders of Wildlife. Linn Falls, OR.

California Department of Forestry and Fire Protection (CALFIRE). 2011. *Final Initial Study/Mitigated Negative Declaration for the proposed Bridge Street Fuel Break Project San Luis Obispo County.* Sacramento, CA.

California Department of Fish and Wildlife. 2015. California Natural Diversity Database (CNDDB) *Endangered, Threatened and Rare Plants List.* Accessed June 2015. Available at: https://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp

California Department of Fish and Wildlife. 2015. California Natural Diversity Database (CNDDB) *Special Animals List.* Accessed June 2015. Available at: https://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp

Campbell, Marti. 2012. *Benefits of Forest Restoration: Literature Review.* Prepared for the Coalition for the Upper South Platte. Lake George, CO.

Coffman, T. 1995. *The Cambria Forest: Reflections on Its Native Pines & Its Eventful Past.* Cambria, CA: Coastal Heritage Press.

Jones & Stokes. 2002. *Cambria Forest Management Plan.* Prepared for the Cambria Forest Committee. Cambria, CA.

Morro Group / SWCA Environmental Consultants. 2009. *Final Master Environmental Impact Report for the Fiscalini Ranch Preserve.* San Luis Obispo, CA.
RRM Design Group. 2003. *East-West Ranch Public Access & Resource Management Plan*. Prepared for Cambria Community Services District.

Oneto, S. R. Oneto, J. M. DiTomaso and G. B. Kyser. 2009. *Brooms: Integrated Pest Management for Home Gardeners and Landscape Professionals.* University of California at Davis. Davis, CA.

Pitch Canker Task Force. *Guidelines for Handling Woody Material Infested with the Pitch Canker Fungus.* Accessed June 2015. Available at: http://ufei.calpoly.edu/pitch_canker/management.lasso?guidelines#info

Rogers, D.L. 2002. *In situ genetic conservation of Monterey pine (Pinus radiata D. Don): Information and recommendations.* Report No. 26. Genetic resources Conservation

Program, Division of Agriculture and Natural Resources, University of California, Davis, CA

Rogers, D.L. 2002. *Genetic Conservation of Monterey Pine* in Tales from the Cambria Woods. The Cambria Forest Committee. Cambria, CA Pg 45

Schnepf, Chris, S. Kegley, R. Graham and T.B. Jain. 2009. *Managing Organic Debris for Forest Health – Reconciling fire hazard, bark beetles, wildlife and forest nutrition needs.* University of Idaho. Moscow, ID.

Staub Forestry and Environmental Consulting. 2011. *Forest Management Plan for Covell Ranch*. Prepared for the Nature Conservancy. Felton, CA.

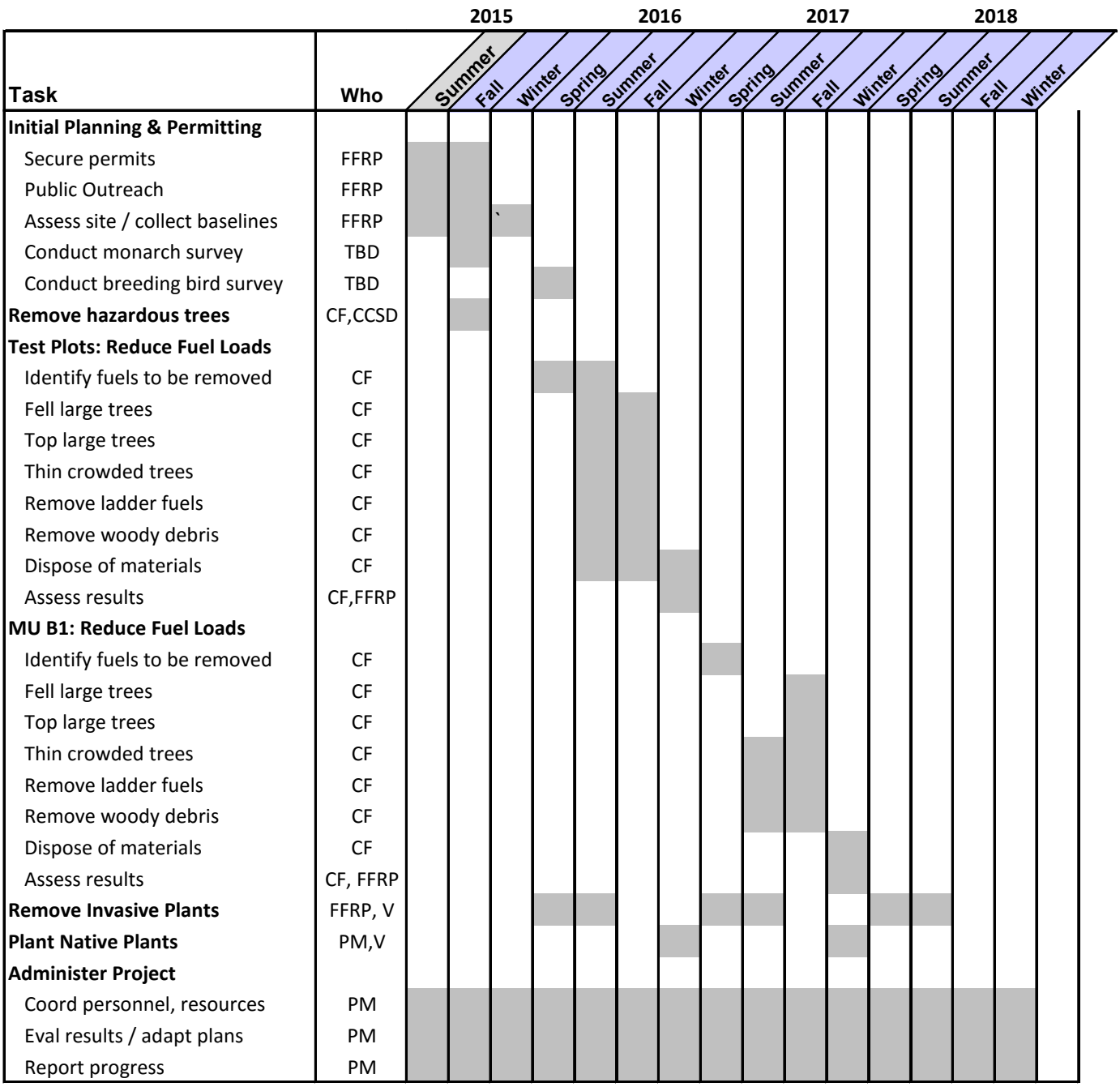
Sugihara, Neil G., J.W. Van Wagtendonk, J. Fites-Kaufman, K. Shaffer and A.E. Thode. 2006. *Fire in California's EcoSystems.* University of California Press. Berkeley, CA.

United States Department of Agriculture (USDA), Rocky Mountains Forest Service. 2003. *Fire, Fuel Treatments, and Ecological Restoration: Conference Proceedings*. Fort Collins, CO.

United States Natural Resources Conservation Service (NRCS). 2007. *Technical Supplement 14P Gullies and Their Control.* Accessed June 2015. Available at: http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17826.wba

Appendix

Project Schedule



Task	Who
Initial Planning & Permitting	
Secure permits	FFRP
Public Outreach	FFRP
Assess site / collect baselines	FFRP
Conduct monarch survey	TBD
Conduct breeding bird survey	TBD
Remove hazardous trees	CF,CCSD
Test Plots: Reduce Fuel Loads	
Identify fuels to be removed	CF
Fell large trees	CF
Top large trees	CF
Thin crowded trees	CF
Remove ladder fuels	CF
Remove woody debris	CF
Dispose of materials	CF
Assess results	CF,FFRP
MU B1: Reduce Fuel Loads	
Identify fuels to be removed	CF
Fell large trees	CF
Top large trees	CF
Thin crowded trees	CF
Remove ladder fuels	CF
Remove woody debris	CF
Dispose of materials	CF
Assess results	CF, FFRP
Remove Invasive Plants	FFRP, V
Plant Native Plants	PM,V
Administer Project	
Coord personnel, resources	PM
Eval results / adapt plans	PM
Report progress	PM

Legend:

PM : Project Manager
CF : CalFire
CCC: CA Conservation Corps
CCSD: Cambria Community Services District
FFRP: Friends of Fiscalini Ranch
V : Volunteers

Emergency Permit & Hazardous Tree Map

SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

Promoting the wise use of land - Helping to build great communities

October 27, 2015

Cambria Community Services District
5500 Heath Ln.
Cambria, CA 93428

SUBJECT: CAMBRIA COMMUNITY SERVICES DISTRICT (CCSD)
County File Number: ZON2014-00693

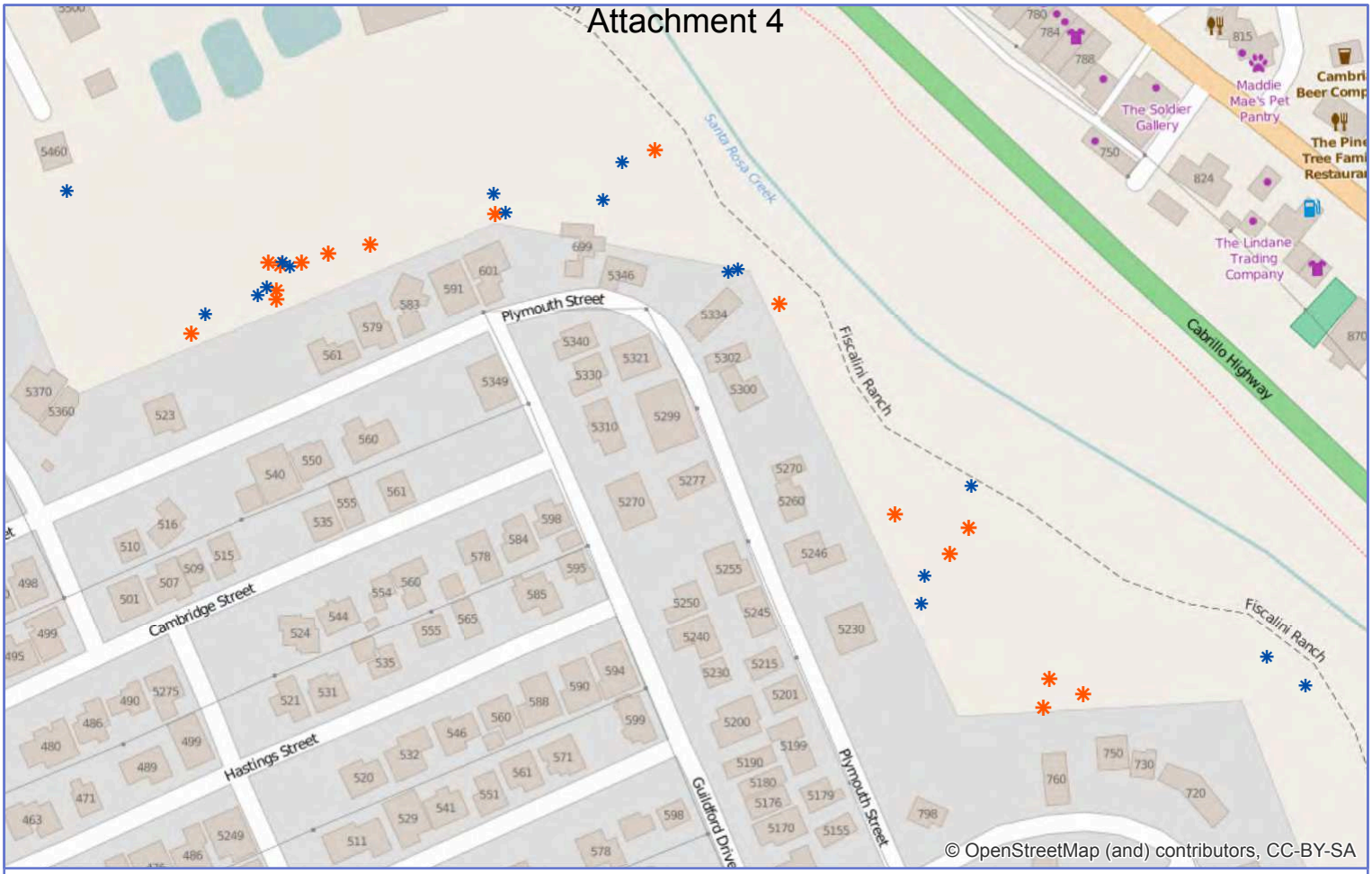
On October 22, 2015, the Planning Commission Received and Filed the following Consent Agenda item:

> Issuance of an Emergency Permit to the **CAMBRIA COMMUNITY SERVICES DISTRICT (CCSD)** authorizing the removal of up to 300 dead or dying trees deemed hazardous by Cal Fire and located on parcels owned by the CCSD. Under the emergency permit, Cal Fire's hazardous tree determination will serve as evidence verifying that the identified trees meet the tree removal criteria in Coastal Zone Land Use Ordinance Section 23.05.064(b), **County File Number: zon2014-00693**. Assessor Parcel Number: Various CCSD Parcels. Supervisorial District: 2.

Sincerely,

R. Hedges

RAMONA HEDGES
Secretary, County Planning Commission



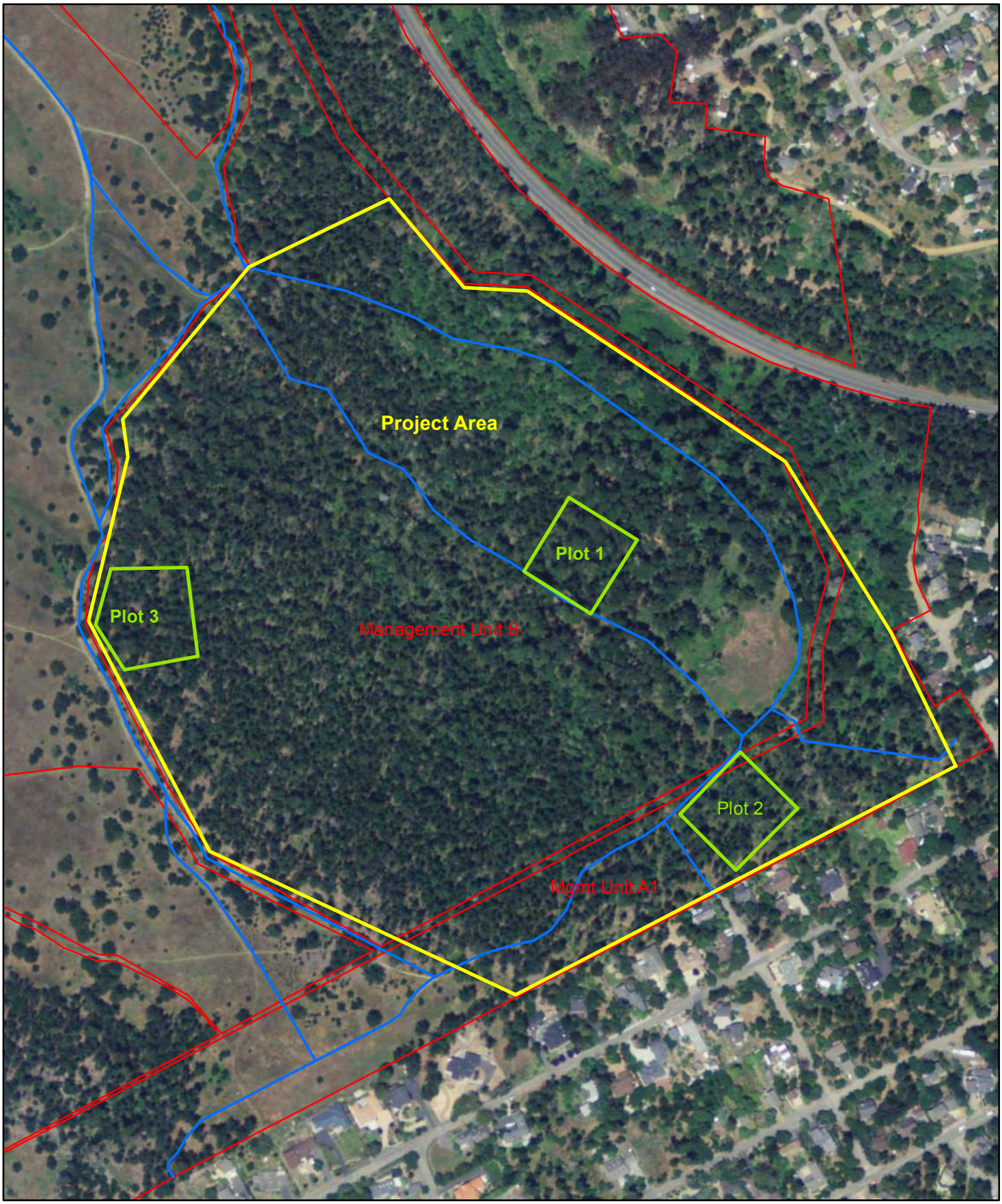
CCSD - FRP Hazard Trees

Fallers Required
Climbers Required

NORTH

Project Site Maps

Fiscalini Ranch Forest Restoration Project



0 65 130 260 390 520

Feet

Friends of the Fiscalini Ranch Forest Restoration Project
Project & Test Plot Boundaries

N
W E
S

CCSD Parcel 013-121-026

Special Status Species

Source: Fiscalini Ranch Master EIR 2009 / Rincon Consultants

TABLE V-5
Special-Status Plant Species Potentially Present within the FRP

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/State/ CNPS/R-E-D	Suitable Habitat or Species Present Within Project Area
Allium hickmanii *Hickman's onion*	Closed-cone coniferous forest, chaparral (maritime), coastal prairie, coastal scrub, and valley and foothill grassland; elev. 5 – 200 meters.	MARCH – MAY	–/--/1B.2	Suitable habitat occurs within the survey area. Species was not observed during botanical surveys.
Arctostaphylos luciana *Santa Lucia manzanita*	Chaparral; rocky slopes with shale substrate; restricted to SLO County; elev. 350-850 meters.	FEBRUARY-MARCH	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Arctostaphylos pilosula Santa Margarita manzanita	Chaparral, closed-cone coniferous forest, shale outcrops and slopes; elev. 170 – 1100 meters.	DECEMBER – MARCH	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Arctostaphylos cruzensis Arroyo de la Cruz manzanita	Broadleafed upland woodland, coastal bluff scrub, closed cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland on sandy soils; elev. 60-310 meters.	DECEMBER – MARCH	–/--/1B.2	Suitable habitat occurs within the survey area. Species not present on site.
Arctostaphylos pechoensis Pecho manzanita	Closed cone coniferous forest, chaparral, coastal scrub on siliceous shale; elev. 150-850 meters.	NOVEMBER – MARCH	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Astralagus didymocarpus var. milesianus Miles's milkvetch	Coastal scrub on clay soils; elev. 20 – 90 meters.	MARCH – JUNE	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Baccharis plummerae ssp. glabrata San Simeon baccharis	Coastal scrub; elev. 50 – 480 meters.	JUNE	–/–/1B.2	Suitable habitat occurs within the survey area. Species was not observed during botanical surveys.
Calochortus obispoensis San Luis Obispo mariposa lily	Chaparral, coastal scrub and grassland communities, often on serpentine soils; elev. 75-730 meters.	MAY-JULY	–/--/1B.2	Suitable habitat occurs within the survey area. Species was not observed during botanical surveys.
Calystegia subacaulis ssp. *episcopalis* Cambria morning-glory	Chaparral and cismontane woodland; elev. 60-500 meters.	APRIL-MAY	–/--/1B.2	Species present on both East and West FRP in annual grassland areas.
Castilleja densiflora ssp. obispoensis Obispo Indian paintbrush	Valley and foothill grassland; elev. 10-400 meters.	APRIL	–/--/1B.2	Species present on West FRP in annual grassland areas.
Cirsium fontinale var. *obispoense* Chorro Creek bog thistle	Chaparral, cismontane woodlands; serpentine seeps; elev. 35-380 meters.	FEBRUARY-JULY	FE/SE/1B.2	No suitable habitat occurs within the survey area. Species not present on site.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/State/ CNPS/R-E-D	Suitable Habitat or Species Present Within Project Area
Cirsium occidentale var. compactum Compact cobwebby thistle	Chaparral, coastal dunes, coastal prairie, coastal scrub; elev 5-150 meters.	APRIL-JUNE	–/--/1B.2	Species present on West FRP along coastal bluff areas.
Dudleya abramsii ssp. bettinae San Luis Obispo serpentine dudleya	Chaparral, coastal scrub, valley and foothill grassland, /serpentinite, rocky; elev. 20 – 180 meters.	MAY-JULY	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Dudleya blochmaniae ssp. blochmaniae Blochman's dudleya	Coastal bluff scrub, chaparral, coastal scrub, valley and foothill grassland on rocky soils, often clay or serpentine; elev. 5-450 meters.	APRIL-JUNE	–/--/1B.1	No suitable habitat occurs within the survey area. Species not present on site.
Eryngium aristulatum var. hooveri Hoover's button celery	Vernal pools; elev. 3-45 meters.	JULY	–/–/1B.1	No suitable vernal pool habitat occurs within the survey area. Species not present on site.
Galium hardhamiae Hardham's bedstraw	Closed-cone coniferous forest, chaparral, serpentinite; elev. 395-975 meters.	APRIL-OCTOBER	–/--/1B.3	Serpentine soil not present within the survey area. Species not present on site.
Horkelia cuneata ssp. sericea Kellog's horkelia	Closed cone coniferous forest and coastal scrub habitats; elev. 10-200 meters.	APRIL-SEPTEMBER	–/--/1B.2	Suitable habitat occurs within the survey area. Species was not observed during botanical surveys.
Layia jonesii Jones's layia	Chaparral and valley and foothill grassland on clay or serpentinite soils; elev. 5-400 meters.	MARCH – MAY	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Malacothamnus palmeri var. involucratus Carmel Valley bush mallow	Chaparral, cismontane woodlands; talus hills and slopes, sometimes on serpentine. Burn dependent. Elev. 30-1100 meters.	MAY-OCTOBER	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Malacothamnus palmeri var. palmeri Santa Lucia bush mallow	Chaparral on rocky soils; elev. 60-360 meters.	MAY-JULY	–/--/1B.2	No suitable habitat occurs within the survey area. Species not present on site.
Piperia michaelii Michael's rein orchid	Coastal bluff scrub, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest; elev. 3 – 915 meters.	APRIL-AUGUST	–/–/4.2	Suitable habitat occurs within the survey area. Species was not observed during botanical surveys.
Perideridia gairdneri ssp. gairdneri Gairdner's yampah	Broadleafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools; 0 – 365 meters.	JUNE – OCTOBER	–/–/4.2	Species observed in Monterey pine forest of the West FRP in 1997. Not observed during 2005 botanical surveys.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/State/ CNPS/R-E-D	Suitable Habitat or Species Present Within Project Area
Pinus radiata **Monterey pine**	**Closed-cone coniferous forest, cismontane woodland; dry bluffs and slopes; elev. 25-185 meters.**	**-**	**–/–/1B.1**	**Species present on both East and West FRP on steep slopes and higher elevation areas.**
Sanicula maritime Adobe sanicle	Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland, /clay, serpentinite; elev. 30 – 240 meters.	FEBRUARY – MAY	–/--/1B.1	No suitable habitat occurs within the survey area. Species not present on site.
Streptanthus albidus ssp. *peramoenus* most beautiful jewel-flower	Chaparral, cismontane woodlands, valley and foothill grasslands on serpentinite soil; elev. 120-1000 meters.	APRIL-JUNE	–/--/1B.2	Serpentine soil not present within the survey area. Species not present on site.
Sueda californica California seablite	Margins of coastal salt marsh up to 15 feet.	JUNE – OCTOBER	FE/–/1B.1	Suitable habitat occurs within the survey area. Species was not observed during botanical surveys.
Tritelia ixioides ssp. *cookii* Cook's tritelia	Closed-cone coniferous forest, cismontane woodland /serpentinite seeps; elev 150 – 700 meters.	MAY-JUNE	–/--/1B.3	Suitable habitat occurs within the survey area. Species was not observed during botanical surveys.
General references: Hickman (ed.) 1993, Munz 1974, CNDDB 2006, CNPS 2006, Tibor, 2001.				
Status Codes --= *No status* Federal: **FE** = Federal Endangered **FT**=Federal Threatened **SE**=State Endangered	California Native Plant Society (CNPS): **List 1B** = rare, threatened, or endangered in California and elsewhere **List 2**=Plants rare, threatened, or endangered in California but more common elsewhere *Threat Code*: 1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) 2 = Fairly endangered in California (20-80% occurrences threatened) 3 = Not very endangered in California (<20% of occurrences threatened or no current threats known) **Species listed in bold type are known to be present on the site.**			

TABLE V-6
Special-Status Wildlife Species Potentially Present within the FRP

Common Name	Federal / State / Other Status	General Habitat Description	Habitat Present/ Absent	Potential for Presence
Invertebrates				
Monarch butterfly *Danaus plexippus*	– / – / SA	Roosts in coastal eucalyptus and Monterey cypress stands.	P	Species was not observed during surveys; however, suitable roosting (but not overwintering) habitat is present on the site. Species is expected to occur within the site on a seasonal basis (observed by ranch users)
Fish				
Steelhead – south/central California coast ESU *Oncorhynchus mykiss irideus*	FT / -- / ~~CSC~~SSC	Clear, cool stream with abundant instream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	P	Species has been identified within Santa Rosa Creek, and is expected to occur within the site during periods of high flow.
Tidewater goby Eucyclogobius newberryii	FE/– /~~CSC~~SSC	Brackish shallow lagoons and lower stream reaches in still, but not stagnant water.	P	Species has been identified within Santa Rosa Creek, and could occur within the site when flow is suitable.
Amphibians				
Coast Range newt *Taricha torosa torosa*	– / -- / ~~CSC~~SSC	Breed in ponds, reservoirs, and slow-moving streams. Frequent terrestrial habitats.	P	Species was not observed during ~~surveys,~~surveys; however, suitable habitat is present within Santa Rosa Creek. Species is likely to occur within the site.
California red-legged frog *Rana aurora draytonii*	FT / -- / ~~CSC~~SSC	Aquatic habitats with little or no flow, the presence of surface water to early June, surface water depths to at least 2.3 feet, and the presence of sturdy underwater supports such as cattails.	P	Species was not observed during ~~surveys,~~surveys; however, suitable habitat is present within Santa Rosa Creek. Species is likely to occur within the site.
Reptiles				
Western pond turtle *Clemmys marmorata pallida*	– / -- / ~~CSC~~SSC	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	P	Species was not observed during ~~surveys,~~surveys; however, suitable habitat is present within Santa Rosa Creek. Species is likely to occur within the site.
Coast (California) horned lizard *Phrynosoma coronatum (frontale)*	– / -- / ~~CSC~~SSC	Frequents a wide variety of habitats. Most commonly occurring in lowlands along sandy washes with scattered low bushes.	P	Species was not observed during ~~surveys,~~surveys; however, suitable habitat is present within upland areas. Species is likely to occur within the site.
Silvery legless lizard *Anniella pulchra pulchra*	– / -- / ~~CSC~~SSC	Sandy or loose loamy soils under sparse vegetation. Soils with high moisture content.	P	Species was not observed during ~~surveys,~~surveys; however, suitable habitat is present within upland areas. Species is likely to occur within the site.

Common Name	Federal / State / Other Status	General Habitat Description	Habitat Present/ Absent	Potential for Presence
Two-striped garter snake *Thamnophis hammondi*	– / -- / ~~CSC~~SSC	Ponds, reservoirs, and slow-moving streams. Frequents adjacent terrestrial habitats.	P	Species was not observed during surveys; however, suitable habitat is present within Santa Rosa Creek. Species could occur within the site.
Birds				
White-tailed kite *Elanus leucurus*	MBTA/ FP / --	Open grasslands, meadows, or marshlands for foraging close to isolated dense-topped trees for nesting and perching.	P	Species was not observed during surveys; however, suitable roosting and foraging habitat is present. Species could occur within the site, and has been observed by ranch users.
Loggerhead shrike *Lanius ludovicianus*	MBTA / -- / ~~CSC~~SSC	Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	P	Species was not observed during surveys; however, suitable roosting and foraging habitat is present. Species could occur within the site.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FC, MBTA / SE / –	Forests to open riparian woodlands with thick understory.	P	Species was not observed during surveys; however, suitable roosting and foraging habitat is present. Species could occur within the site.
Burrowing owl *Athene cunicularia*	MBTA / -- / ~~CSC~~SSC	Open, dry annual or perennial grasslands, deserts and scrublands with low-growing vegetation. Subterranean nester, dependent upon burrowing mammals.	P	Species was not observed during surveys; however, suitable foraging habitat is present. Species could occur within the site, and has been observed by ranch users.
California horned lark *Eremophila alpestris actia*	MBTA / -- / ~~CSC~~SSC	Short grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	P	Species was not observed during surveys; however, suitable nesting and foraging habitat is present. Species could occur within the site, and has been observed by ranch users.
Prairie falcon *Falco mexicanus*	– / -- / ~~CSC~~SSC	Forages in open areas and grasslands. Nests in cliffs overlooking suitable foraging habitat.	P	Species was not observed during surveys; however, suitable foraging habitat is present. Species could occur within the site.
Tricolored blackbird *Agelaius tricolor*	MBTA / -- / ~~CSC~~SSC	Open water, tall and dense cattails or tules. Large nesting colonies near cropland and insect prey base.	P	Species was not observed during surveys, and suitable habitat is not present. Species unlikely to occur within the site.
Other nesting birds Class Aves	MBTA / --/ CDFG Code §3503	Various habitats (nesting).	P	Nesting bird species were not observed during biological surveys of the site, however, various bird species may nest in trees and other habitats within the site.
Mammals				
Pallid bat *Antrozous pallidus*	– / -- / ~~CSC~~SSC	Roosts in deep crevices, caves, mines, rock faces, bridges and buildings.	P	Species was not observed during surveys; however, suitable roosting and foraging habitat is present. Species could occur within the site.
Monterey dusky-footed (Santa Lucia) woodrat *Neotoma macrotis luciana*	– / – / SSC	Moderate vegetative canopy, such as oak woodland, with brushy understory.	P	Species was not observed during surveys; however potential habitat is present, and this species has been observed by local biologists.

Common Name	Federal / State / Other Status	General Habitat Description	Habitat Present/ Absent	Potential for Presence
American badger *Taxidea taxus*	– / – / SSC	Open grasslands and scrub habitats.	P	Species was not observed during surveys; however potential habitat is present, and this species has been observed by local biologists.

Status Codes:

--= No status

Federal: **FE** = Federal Endangered
FT = Federal Threatened
FC = Federal Candidate
MBTA = Protected by Federal Migratory Bird Treaty Act

State: **SE** = State Endangered **ST** = State Threatened
FP = Fully Protected **SA** = CNDDB Special Animal
SSC = California Species of Special Concern ~~species~~
CDFG §3503 = Protected by Sect 3503 of CDFG code

Special Status Species added to CNDDB since preparation of Master EIR

Scientific Name	Common Name	Status Federal/State CDFW or CRPR
Animals		
Ammodramus savannarum	Grasshopper sparrow	--/-- Species of Special Concern
Rana boylii	foothill yellow-legged frog	--/-- Species of Special Concern
Plants		
Astragalus nuttallii var. *nuttallii*	ocean bluff milk-vetch	--/-- 4.2
Clinopodium mimuloides	monkey-flower savory	--/-- 4.2
Delphinium parryi ssp. *eastwoodiae*	Eastwood's larkspur	--/-- 1B.2
Galium californicum ssp. *luciense*	Cone peak bedstraw	--/-- 1B.3
Grindelia hirsutula var. *maritima*	San Francisco gumplant	--/-- 3.2
Microseris paludosa	marsh microseris	--/-- 1B.2
Monolopia gracilens	woodland woolythreads	--/-- 1B.2
Streptanthus albidus ssp. *peramoenus*	most beautiful jewel-flower	--/-- 1B.2